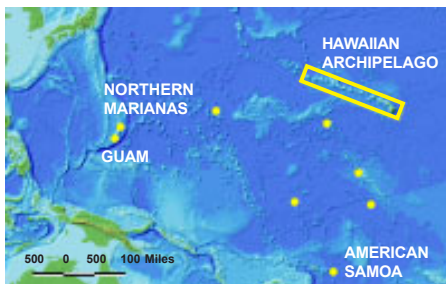




## U.S. Fish & Wildlife Service

# The Coastal Program

*Achieving Success through Pacific Island Partnerships*



## Caring for Our Coastal Habitats

### The Pacific Islands Are Unique – Biologically, Geographically and Culturally

- The U.S. Fish and Wildlife Service's Pacific Island Ecoregion consists of hundreds of small tropical islands under a variety of political jurisdictions and scattered across thousands of square miles of open ocean. These include Hawaii, the Commonwealth of the Northern Marianas Islands, the Territories of



*Bluestripe snapper introduced to Hawaii from French Polynesia in the 1950s are displacing native species of reef fish.*  
Photo by Phillip Colla

Guam and American Samoa, and several U.S. possessions such as Wake and Midway Atolls.

- The Service also occasionally works in independent Pacific nations like Palau and the Federated States of Micronesia, when invited.

- No point on any U.S. Pacific island is more than 30 miles from the ocean.

- The U.S. Pacific islands contain many unique habitats: atolls, coral reefs, estuaries, wetlands, mountain streams, tropical rainforests, lava tube caves, sand dunes, and anchialine pools.

- Traditional Polynesian and Micronesian cultures emphasized knowledge and stewardship of terrestrial and marine resources.

- Hawaii has the highest proportion of terrestrial and marine endemic species (*i.e.*, species found only in one area) in the nation.

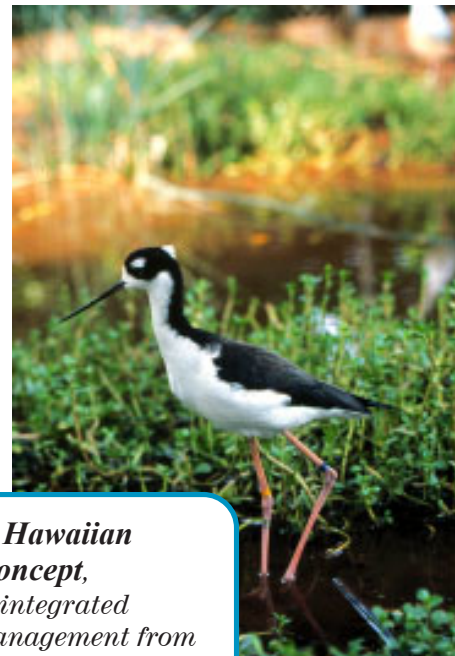
- Alien species are the most serious threat to native species in the Pacific.

- 94% of all U.S. coral reefs are in the Pacific islands.

### Coastal Program Goals

- Implement voluntary coastal restoration and protection projects in partnership with private, state and federal landowners;

- Inventory, map and prioritize coastal and marine biological resources using GIS technology;



*The Ancient Hawaiian Ahupua`a Concept, emphasizing integrated watershed management from the mountain tops to the coral reefs, provides a viable model for community-based, natural resource management today.*

*Endangered Hawaiian still require wetland habitat for feeding and nesting*

- Incorporate traditional Pacific island concepts of watershed and marine management;

- Develop innovative restoration and alien species control techniques;

- Build public support for coastal conservation through project partnerships, education and encouraging volunteer involvement; and

- Use an ecosystem approach to integrate Coastal Program priorities with Fish and Wildlife Service priorities in other programs, including recovery of listed and rare species, contaminants issues, NEPA and permit review, protection of designated critical habitat and habitat restoration on national wildlife refuges.



*Threatened green sea turtles are found throughout coastal areas in the Pacific. Photo by Barbara Mazfield/USFWS*

***Hawaii is the Endangered Species Capital of the United States:***

*Hawaii and the other U.S. Pacific Islands have the greatest number of species at risk in the country:*

- >330 Threatened and Endangered species,*
- >135 Candidate species and*
- >1,000 Species of Concern.*

## Project Examples

*Surveys of native coastal vegetation and anchialine pools.* GPS locations of unique habitats and rare and listed coastal taxa will be mapped. Survey results will be used to develop conservation recommendations that help prioritize Coastal Program activities.

*Development of new techniques for restoring native vegetation in coastal wetlands.* A cooperative research project with the Oahu National Wildlife Refuge Complex and the University of Hawaii will develop new techniques for restoring native vegetation in coastal wetlands. Research on the refuge will focus on native plants that will compete well against invasive alien weeds and provide feeding and nesting habitat for endangered waterbirds and migratory shorebirds and waterfowl.

*Protection of hawksbill sea turtle nesting beaches.* In cooperation with the National Park Service and the nonprofit Hawaii Wildlife Fund, turtle nesting beaches on Hawaii and Maui are protected and monitored to increase survival of turtle hatchlings. Hawksbills are critically endangered and fewer than 50 nesting females are

left in Hawaii. Activities include predator control, shielding coastal lighting, assisting stranded hatchlings and monitoring turtle populations.

*Restoration and protection of coastal wetlands and anchialine pools.* A cooperative project with Kamehameha Schools, Ducks Unlimited and the Natural Resource Conservation Service is protecting a coastal ecosystem on privately owned land on Hawaii Island. Actions include building a predator exclusion fence and wildlife viewing platform, erecting educational signs, controlling invasive weeds and predators, mapping native vegetation and anchialine pond species, monitoring bird populations and planning restoration actions. Several species of listed and migratory birds will benefit, as well as rare plants and candidate species of invertebrates.

*Kaena Point coastal vegetation and seabird restoration.* In partnership with the Hawaii Department of Land and Natural Resources, rare coastal plants and seabird colonies are being restored at the Kaena Point Natural Area Reserve on Oahu. Actions include building a native plant greenhouse; installing water tanks and irrigation systems; outplanting rare and listed plants; controlling alien weeds, predators and off-road vehicles; and putting up educational signs.

*Waimanalo watershed restoration planning and streambank stabilization.* The Coastal Program is working with the Hawaiian community, the Hawaii Department of Health and the University of Hawaii to test stream bank restoration techniques and plan the restoration of the watershed. Endemic aquatic species, coral reefs and endangered waterbirds will benefit.



*American Samoa's Manua Islands are home to endangered sea turtles, seabird colonies, coral reefs, and rare forest species. Photo by Chris Swenson/USFWS*

*Marine alien species identification workshop.* In cooperation with Bishop Museum and the University of Hawaii, and with a matching grant from the Packard Foundation, the Coastal Program funded a workshop on identifying highly invasive marine alien species. The workshop was open to resource agencies, researchers and selected high school students.

*Hawaii Nature Center coastal education program for elementary schools.* The Coastal Program funded the nonprofit Hawaii Nature Center to buy equipment and supplies to help implement the first year of their coastal education program. The program will reach over 3,000 5<sup>th</sup> and 6<sup>th</sup> grade children on Oahu each year.

**For more information about the Pacific Islands Coastal Program, contact Chris Swenson at (808) 541-3441 or via email at [Chris\\_Swenson@fws.gov](mailto:Chris_Swenson@fws.gov).**



*Coastal strand vegetation and seabird colonies are being restored at Kaena Point Natural Area Reserve on Oahu. Photo by Chris Swenson/USFWS*